

CLEAN COPY OF ALL CLAIMS

- 1. A composition with synergistic anti-inflammatory properties for use in conditions induced by inflammatory disease-causing biomolecules released from mast cells by the activation and degranulation of said mast cells, comprising a non-bovine proteoglycan and unrefined kernel olive oil, and one or more of a D-hexosamine sulfate, a flavonoid, S-adenosylmethionine, and a histamine-1-receptor antagonist, in an appropriate excipient or vehicle for oral or topical administration.**
- 2. The composition according to claim 1, wherein said proteoglycan is selected from the group consisting of non-bovine chondroitin sulfate, keratan sulfate, dermatan sulfate and hyaluronic acid.**
- 3. The composition according to claim 2, wherein said chondroitin sulfate is derived from shark cartilage.**
- 4. The composition according to claim 1, wherein said hexosamine sulfate is D-glucosamine sulfate.**
- 5. The composition according to claim 1, wherein said flavonoid is selected from the group consisting of quercetin, myrisetin, genistein and kaempferol.**
- 6. The composition according to claim 1, wherein said olive oil contains omega fatty acids and alpha-tocopherol.**
- 7. The composition according to claim 24, said composition being for oral use, comprising 300 mg each of non-bovine chondroitin sulfate C, quercetin and D-glucosamine sulfate, in kernel olive oil.**
- 8. The composition according to claim 7, further comprising 100 mg of S-adenosylmethionine.**
- 9. The composition according to claim 1, wherein said inflammatory disease is arthritis and said composition is contained in an ointment or cream for topical application, comprising, in mg%, chondroitin sulfate 0.05; unrefined kernel olive oil, 1-5; and one or more of D-glucosamine sulfate, 0.05, and quercetin, 0.03.**
- 10. The composition according to claim 9, further comprising diphenhydramine, 5mg%.**
- 11. A composition according to claim 1, said composition consisting of a mouth wash composition, comprising chondroitin sulfate, 0.4 M; unrefined kernel olive oil 0.5-1.5 mg%; and one or more of D-glucosamine sulfate, 0.4 M; and quercetin, 0.3 M, in a mouth wash vehicle.**

12. A composition according to claim 1, said composition consisting of a tooth paste, comprising, in mg%, chondroitin sulfate, 0.05; and unrefined kernel olive oil, 1-5, and one or more of D-glucosamine sulfate, 0.05; and quercetin, 0.03; in a tooth paste vehicle.

13. A composition according to claim 1, said composition consisting of a sunscreen composition, comprising, in mg%, chondroitin sulfate, 0.05, and unrefined kernel oil, 1-5; and one or more of D-glucosamine sulfate, 0.05; quercetin, 0.03; and titanium dioxide, 1-5; in a sun screen vehicle.

22. A method of treating a subject suffering from an inflammatory disease, wherein said inflammatory disease results from biomolecules secreted from activated and degranulated mast cells, said inflammatory disease being selected from the group consisting of osteoarthritis, cancer, fibromyalgia, atherosclerosis, inflammatory bowel disease, interstitial cystitis, irritable bowel syndrome, migraines, angina, chronic prostatitis, eczema, arthritis, multiple sclerosis, psoriasis, sun burn, and periodontal disease, comprising the step of administering to said subject an effective amount of a composition according to claim 1.

23. The composition according to claim 1, wherein said histamine-1-receptor antagonist is diphenhydramine.

24. The composition according to claim 1, wherein said inflammatory disease is arthritis and said composition is designed for oral administration, comprising non-bovine chondroitin sulfate, quercetin, D-glucosamine sulfate, and unrefined kernel olive oil.

25. The composition according to claim 9, comprising, in mg%, chondroitin sulfate, 0.05; D-glucosamine sulfate, 0.05; quercetin, 0.03; and, unrefined kernel olive oil, 1-5.

26. The composition according to claim 1 for oral use in allergic conditions, comprising chondroitin sulfate, a flavonoid selected from the group consisting of quercetin, myricetin and kaempferol, and said kernel olive oil.

27. The composition according to claim 26, comprising 200 mg each of chondroitin sulfate and kaempferol and said kernel olive oil.

28. The composition according to claim 26, comprising chondroitin sulfate and myricetin and said kernel olive oil.

29. The composition according to claim 28, supplemented with a histamine-1-receptor antagonist.

30. The composition according to claim 29, wherein said antagonist is

diphenhydramine.

31. The composition according to claim 1, wherein said inflammatory disease is cancer and wherein said composition is designed for oral use, comprising 25-50 mg of genistein and 150-300 mg of quercetin, and said kernel olive oil.

32. The composition according to claim 1, wherein said inflammatory disease is atherosclerosis with or without myocardial ischemia, comprising 100-300 mg each of chondroitin sulfate, myricetin and S-adenosylmethionine, and said kernel olive oil, in a vehicle for oral use.

33. The composition according to claim 1, wherein said inflammatory disease is interstitial cystitis, said composition comprising 100-300 mg of chondroitin sulfate, 100-300 mg of hyaluronic acid, and 200-400 mg quercetin, and said kernel olive oil, in a vehicle for oral use.

34. The composition according to claim 1, wherein said inflammatory disease is prostatitis, said composition comprising 100-200 mg of chondroitin sulfate, 100-200 mg hyaluronic acid and 200-400 mg of quercetin, and said kernel olive oil, in a vehicle for oral use.

35. The composition according to claim 1, wherein said inflammatory disease is multiple sclerosis, said composition comprising 100-300 mg each of chondroitin sulfate, myricetin and S-adenosylmethionine, and said kernel olive oil, in a vehicle for oral use.